PREVENT STORM WATER CONTAMINATION

Best Management Practices for

Section V - Textile Mills, Apparel, Leather and Other Fabric Facilities

SIC codes: 2200-2399 & 3131-3199

General Information:

1) Federal and State Storm Water regulations require the City to reduce the quantity of pollutants that enter our storm drains, rivers, and washes from rain water and other sources. 2) Water from any source that contains contaminants is prohibited from entering the storm drain system which includes streets, pipes, catch basins (street grates), ditches, washes, parks, and rivers. 3) Commercial and industrial wash or wastewater is prohibited from entering the storm drain system, street or any other outside area. 4) All washing activities that use soap, solvents, degreasers or any other chemical must be hauled to a landfill or discharged into the sanitary sewer through a sand/oil interceptor or approved pretreatment device. 5) City Code 32C requires any person or business that has a "potential" to pollute storm water, to develop and implement a Storm Water Management Plan (SWMP). 6) The BMPs listed here are not inclusive, and must be tailored for your facility. See 40CFR122 Section 6.V.6, October 30, 2000, for additional required BMPs.

Preparation (e.g. de-sizing and scouring)

- Waste stream reuse for typical bleach unit processing; recycle J-box or kier drain wastes to saturator.
- Make use of countercurrent washing.
- Use washer waste from scour operation for batch scouring.

Dyeing

- Perform analysis of spent dye baths for residual materials.
- Where feasible, obtain background information and data necessary before making product substitutions. This includes OSHA form 20 data and technical data.
- Be aware of potential problem chemicals, such as aryl phenol ethoxylates, chlorinated aromatics, and metals.
- Employ pad batch dyeing to eliminate the need for salts and chemical specialties from the dyebath, with associated reduction in cost and pollution source reduction.

Finishing

- Reuse residual portions of finish mixes as much as possible by adding back to them the required components to make up the next mix.
- Return non-contact cooling water and stream condensates to either a hot water holding tank or a clear well. If neither is available, segregate waste streams from sources that do not generally require treatment from other waste streams that do require treatment.

Chemical screening and inventory control

- Employ prescreening practices to evaluate and consider chemicals on a wide range of environmental and health impact criteria.
- Develop and perform a routine raw material quality control program.
- Review and develop procedures for source reduction of metals.
- Promptly transfer used fluids to the proper container; do not leave drip pans or other open containers around the shop. Empty and clean drip pans and containers.
- Do not pour liquid waste down floor drains, sinks, or outdoor storm drain inlets.
- Plug floor drains that are connected to the storm drain or sanitary sewer; if necessary, install a sump pump that is pumped regularly.
- Inspect the maintenance area regularly for proper implementation of control measures.
- Train employees on proper waste control and disposal procedures.

Material Handling for:

A. Bulk liquid storage and containment

- Store permanent tanks in a paved area surrounded by a dike system that provides sufficient containment for the larger of either 10% of the volume of all containers or 110% of the volume of the largest tank.
- Maintain good integrity of all storage tanks.
- Inspect storage tanks to detect potential leaks and perform preventive maintenance.
- Inspect piping systems (pipes, pumps, flanges, couplings, hoses, and valves) for failures or leaks.
- Train employees on proper filling and transfer procedures.

B. Containerized material storage

- Store containerized materials (fuels, paints, solvents, etc.) in a protected, secure location away from drains.
- Store reactive, ignitable, or flammable liquids in compliance with the local fire code.
- Label all materials clearly.
- Identify potentially hazardous materials, their characteristics, and use.
- Control excessive purchasing, storage, and handling of potentially hazardous materials.
- Keep records to identify quantity, receipt date, service life, users, and disposal routes.
- Secure and carefully monitor hazardous materials to prevent theft, vandalism, and misuse of materials.
- Educate personnel for proper storage, use, cleanup, and disposal of materials.
- Provide sufficient containment for outdoor storage areas. See Bulk Liquid Storage.
- Use temporary containment such as portable drip pans.
- Use spill troughs or drip pans for drum taps.

C. Above-ground Tanks

- Clean area regularly.
- Develop and implement a Spill Prevention Control and Countermeasure program (SPCC).
- Provide spill and overflow protection.
- Minimize runoff of storm water from adjacent areas.
- Restrict access to the area.
- Insert filters in adjacent catch basins.
- Provide absorbent booms in un-bermed fueling areas.
- Use dry clean-up methods.
- Permanently seal drains that may discharge to the storm drain.

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Continued

Employee Training

- At a minimum address the following activities during training:
- Use of reused / recycling waters.
- Solvent management.
- Proper disposal of dyes.
- Proper disposal of petroleum products and spent lubricants.
- Spill prevention and control.
- Fueling procedures.
- General good housekeeping practices.

Designated material mixing areas

- Mix solvents in designated areas away from drains, ditches, and surface waters.

Fueling areas

- Consider covering fueling areas.
- Use spill and overflow protection.
- Use dry clean-up methods.
- Minimize run-on of storm water to fueling areas.

Comprehensive Site Compliance Evaluation

- Schedule and conduct at least once per year an evaluation (inspection) to address the following areas:
  - Storage Tank areas.
  - Waste disposal and storage areas.
  - Dumpsters and open containers stored outside.
  - Materials storage areas.
  - Engine maintenance and repair areas.
  - Material handling areas.
  - Loading dock areas.

General water conservation techniques

- Use "low liquor ratio" dyeing machines where possible.
- Use of foam processing (mercerizing, bleaching, dyeing, finishing) where feasible as a water conservation process.

Training

- All employees should be trained in the following areas at least once per year.
  - Spill response
  - Good housekeeping
  - Material management practices
  - Procedures for equipment and container washing.

Inspections

- Conduct routine monthly storm water inspections and during wet weather within 24 hours of the event.
- Inspect the following areas:
  - Transfer and transmission lines.
  - Spill prevention.
  - Good housekeeping practices.
  - Management of process waste products.
  - All structural and non-structural BMPs.
  - Complete the BMP checklist during each inspection.
- All areas exposed to precipitation will be visually inspected for evidence of or the potential for pollutants entering the storm drain system.
- Structural BMPs (berms and dikes) will be inspected to ensure they are operating correctly.

Storm Water Management Plan (SWMP) or Storm Water Pollution Prevention Plan (SWPPP)

- Develop and implement a SWMP or SWPPP.
- All Storm Water Plans (SWMP or SWPPP) must be submitted to the city for approval.
- SIC codes in this class must submit an industrial Notice of Intent (NOI) to ADEQ.

If spills occur:

- **Stop the source of the spill immediately.**
- **Contain the liquid until cleanup is complete.**
- **Deploy oil containment booms if the spill may reach wateror a storm drain.**
- **Cover the spill with absorbent material.**
- **Keep the area well ventilated.**
- **Dispose of clean-up materials properly.**
- **Do not use an emulsifier or dispersant.**

The BMPs found on this page are paraphrased from Federal Storm Water documents 40CFR122, 1995 or later.

Storm Water Management
A member of STORM
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Only Rain in the Storm Drain!

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